EPI NORTH
The Northwest Territories Epidemiology Newsletter

Children and Obesity

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It would appear as though daily news headlines announce new study results about the declining state of children's health. Canada has some of the most overweight and obese children in the world.[1] While readers may tire of the latest "weight crisis" or "lack of nutrition" headline about today's children, it is important to remember that obesity is a serious and growing epidemic. The end result of unhealthy eating and low levels of physical activity will have devastating effects on future generations. Dr. David Katz, a Heart and Stroke Foundation lecturer at a 2003 Canadian Cardiovascular Congress predicted that:

> *"Children growing up in North America today are at risk of being the first generation in modern memory that will have a shorter life expectancy than their parents."*

What does this mean?

For perhaps the first time in history – specialists predict that today's children may have shorter life expectancies and die at a younger age than their parents or grandparents. In the NWT, statistics indicate that the health of many northerners is poorer than that of our southern neighbours. There is considerable evidence that many health problems are due to diet[1], and other lifestyle factors.

Statistics related to activity levels for children aged 12 – 19 show that although Northwest Territories children report higher levels of physical activity than their Canadian counterparts, levels still leave room for improvement. Approximately 35% of children between 12 – 19 years of age are either moderately active or inactive. *Table 1* illustrates self-reported activity in the NWT and Canada.

Table 1: Leisure-time Physical Activity, Boys and Girls, 12 – 19 Years, 2003

Leisure-time Physical Activity	NWT	Canada
Leisure-time physically active	61.0%	47.2%
Leisure-time moderately physically active	14.3%[E]	22.6%
Leisure-time physically inactive	20.9%[E]	27.2%
Leisure-time physical activity, not stated	F	2.9%

E = use with caution F = too unreliable to be published

Continued on page 3

Population aged 12 and over are reporting levels of physical activity based on their responses to questions regarding frequency, duration and intensity of participation in leisure-time physical activity. The apparent differences between the NWT and Canada are not statistically different.

Northwest Territories Health and Social Services

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Editor's Note

Janet Hopkins, Managing Editor

This issue includes a variety of articles from the Department of Health and Social Services Health Promotion Team, focusing on the ongoing challenge to keep our children and ourselves active and healthy by encouraging healthy eating habits, increasing physical activity and building a smoke free generation. This is not an easy task as Christine Raves, Health Promotion Intern talks about in her article on Children and Obesity and the growing concern regarding the health detriment to the future generation if changes in our childrens' eating habits and activity levels are not addressed now by both professionals and parents.

Butthead is back for another year! Miriam Wideman and Christine Raves supply a synopsis of the key findings and positive impact the Butthead Campaign has had in influencing and educating youth about the health risks of smoking.

Elsie De Roose, Team Leader, Health Promotion and Geoff Ray, Executive Director, NWT Recreation and Parks Association give a candid look at the statistics on the status of our physical activity as Canadians. In addition, they review the results of a pilot project a "Prescription for Walking" which was developed in collaboration with a number of organizations to assess the viability of joint health and recreation partnerships in promoting walking prescription pads.

The article NWT School Active Living Kits a Summary of Findings a Two Year Pilot, is provided by Jo Russell, Health Promotion Coordinator, YHSS, and Elaine Stewart, Early Childhood Programs, ECE. The Active Living Kits were distributed in 2004-2005 to select middle grade classrooms in the NWT. This article summarizes how using the Active Living Kits in the classroom provided opportunities to make physical activity easy and fun and contributed to students' increased levels of physical activity throughout the day.

Health on Line provides several Internet choices for information on active living for parents and professionals.

And once again, Helen MacPherson, Senior Disease Registry Officer keeps us updated on the status of the Notifiable Diseases in the NWT.

Continued from page 1

In addition, according to the Heart and Stroke Foundation of Canada, the latest national statistics show that one in four children is either overweight or obese[2]. This should not be surprising considering children are opting out of physically active playtime, such as traditional activities and community sports, preferring to sit in front of a computer playing video games. Canadian children also watch an average of 26 hours of television each week[3].

Being overweight or obese is a major factor for serious and costly health problems. Heart disease, stroke, Type 2 diabetes, hypertension, hypercholesterolemia, certain types of cancer, osteoarthritis, low self-esteem, and negative consequences on cognitive and social development are some of the effects of being overweight or obese.[4] Anemia and dental caries are an extra burden for those with poor diet.[5] The solution to childhood obesity appears obvious: eat well and exercise – so, why is this solution not working?

Shopping lists, learning and following the NWT/Canada Food Guides, and walking to school instead of riding in a bus or car are all choices that need to occur on an individual basis – and this is important. However, it is imperative to understand healthy eating and active living in a broader context. As John Frank and Dianne Finegood state in the Canadian Journal of Public Health, Vol 96 (3):

"We need to further understand the social, cultural and environmental determinants of healthy eating that operate at the community/neighbourhood, regional, national/provincial/territorial level and in whole societies. These include, for example, the impact of globalization and how it affects our food supply, and barriers to accessing affordable and personally acceptable food"[7]

As those who work in the Northwest Territories health care system are aware, remote and northern communities do not always have the wide selection of food choices available that exists in larger centres. Because of the difficulty of transportation, remote NWT communities face astronomical food costs, poor quality and a lack of variety and availability of perishable foods, particularly fruits and vegetables[8]. A traditional diet is important to maintain but may be hard to access. The current diet of many northerners is often low in iron, folacin, calcium, vitamin D, fibre, fruit and vegetables and often high in fat and sugar – partly due to the substitution of traditional foods with market foods.[9] The modification of the environment (global warming, industrialization) is also causing an impact and raising concerns about contamination of traditional foods available to northern communities.

In the north, activities like hunting, trapping, skiing, snowshoeing, and skating are common during the winter months, but the notorious darkness, low temperatures, wind and wild animals add an extra burden on residents – making it all that much harder, and sometimes even dangerous, to get physically active.

So, how do we encourage our residents to eat well and exercise? The Department of Health and Social Services is working in tandem with many partners as part of the territorial Healthy Choices Framework, which includes the priorities of active living and healthy eating. While this strategy is in development, many initiatives are being piloted or are on-going that will eventually be linked in a more comprehensive manner. Some of these interim activities are highlighted here as well as noted in other articles in this issue of *EpiNorth*.

Initiatives in Schools

Unhealthy lifestyle is a complex issue facing Northern youth, so it is important that schools are involved as partners in promotion and prevention initiatives that lead to the development of healthy bodies and healthy minds.

Physical Education – Active Living

In 2001, the NWT Department of Education, Culture and Employment reviewed the physical education programs for K – 6 classes. The Alberta curriculum and guide was selected for its strengths, including its strong emphasis on active living.

Nationally, the Canadian Association for Health, Physical Education Recreation and Dance launched the term Quality Daily Physical Education (QDPE) as a way to define a program taught by qualified and enthusiastic professionals, offering a variety of learning opportunities to all students on a daily basis throughout the entire school year.[8] QDPE gives students a chance to obtain knowledge and a healthy attitude about active living.

Healthy Food Choices – National and Provincial

Healthy food choices need to be encouraged in schools, recreation centres and health facilities. Vending machines that sell only chocolate bars, potato chips and pop do not provide a healthy range of food choices. To this end, schools and health facilities are currently looking at their policies to promote healthier foods sold in vending machines and in cafeterias.

Many provinces have policies to establish what foods are available on school premises. Two of the most recent provinces to implement a new policy are British Columbia and New Brunswick. In New Brunswick, the Healthier Foods and Nutrition in Public Schools policy came into effect in October 2005.[9] Some of their requirements and standards include:

- Foods with maximum nutritional value will be available and promoted wherever and whenever food is sold or otherwise offered, including vending machines, canteens, cafeterias and hot lunch programs.
- Foods with maximum and moderate nutritional value will be priced as close to cost as practicable.
- Contracts with food providers will be evaluated, in large part, based on their provision of nutritious menu options.

A position paper by the Ontario Medical Association[10] also recommends that school boards be encouraged to:

- Promote increased physical activity in school-aged children.
- Lobby governmental and educational agencies to support physical education as an important part of the curriculum with associated funding.
- Encourage removal of unhealthy snacks and drinks from schools.
- Educate and counsel children and their families about balanced eating.

NWT Initiatives:

North of 60: Drop the Pop Territorial Challenge

The Northwest Territories will take part in a North of 60 Territorial Challenge, March 27th to 31st, 2006 (www.nwtdropthepop.ca). Based on the creative concept of Nunavut's Drop the Pop Campaign, this year's event will challenge schools across the Yukon, NWT, and Nunavut to avoid drinking pop for a full week. Communities and classrooms in each territory can 'drop the pop' and receive funding and incentives for participation. This challenge is intended to create an opportunity for increased awareness about the harmful effects of sugary drinks and the benefits of healthy lifestyles. Partners include the Governments of the Yukon, NWT, and Nunavut, the NWT/NU Dental Association, the Dene Nation, Inuvialuit Regional Corporation, Health Canada, and some northern food retailers.

Get Active Challenge NWT

2005 celebrated the first ever NWT Get Active Challenge (www.getactivenwt.ca), a friendly challenge between communities that ran from April 1st – July 1st, and encouraged residents to lead more active lifestyles. Twenty-two communities participated in the 2005 challenge. There were four winning communities (based on population size), which posted the most *Get Active* hours.

Population size	Community	"Get Active" Hours	Activity Expressed in Days
0 - 250	Enterprise	1,650.55	68.77
251 - 500	Wha Ti	1,221.72	50.90
501 - 1000	Fort Good Hope	12,208.83	508.70
101 and over	Behchoko	35,449.35	1,477.06

The NWT residents, as a whole, performed over 101,897 hours - a total of 4,245.73 days of physical activity.

Active Living is a way of life where people choose to be physically active every day in their community; whether they are at school, at work, at home, or at play.

Partners in this initiative were the Departments of Health and Social Services, Municipal and Community Affairs, and Education, Culture and Employment and the NWT Recreation and Parks Association.

The Future

Healthy eating and active living were, at one time, considered a normal part of daily life in the North, but society has moved to an automated and sedentary existence. To stem the tide of obesity seen in children and adults, it is necessary to reclaim a healthy northern lifestyle. The consequences of not doing so are already being seen in rising rates of preventable disease and corresponding health care costs.

However, with the right information, initiatives, support, and a sustainable focus on prevention, the physical health status for children and adults can improve. Working together, Community Health Representatives, Public Health, Health and Social Services Authorities, the Department of Health and Social Services and many other partners can provide a better future than predicted by Dr. Katz.

The Department of Health and Social Services website provides additional information related to active living, healthy eating and health promotion resources: http://www.hlthss.gov.nt.ca/Features/Initiatives/initiatives.asp

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Don't be a Butthead – Be Smoke Free: Evaluation

***Miriam Wideman**, Health Promotion Consultant, Department of Health and Social Services*
***Christine Raves**, Health Promotion Intern, Department of Health and Social Services*

This article provides a brief synopsis on the main findings of the "Don't Be A Butthead – Be Smoke Free" Campaign. The complete evaluation report[4] can be found online at: http://www.hlthss.gov.nt.ca/content/Publications/Reports/reports.asp.

In an effort to combat high rates of youth smoking, the Department of Health and Social Services developed a media campaign which was funded by Health Canada's Tobacco Control Program. Tait Communications and Consulting was contracted to work on this campaign. The campaign is best described as a social marketing initiative. It made use of a number of different media, with a consistent message throughout – to encourage youth age 8-14 to remain smoke free. The initiative came to be known as the Butthead campaign, named after the cartoon character used extensively in the campaign materials.

There were eight specific objectives that were developed with the design of the Don't Be a Butthead – Be Smoke Free campaign:

1) Obtaining the support, endorsement and co-operation of key community influencers such as elders, community and band councils, within the first six months;
2) Within the first year, 10 elementary/junior high schools (grades 3-9) are actively using the tobacco curriculum;
3) Within the first year, 50% of schools with grades 3 to 9 had at least one class participating in the school challenge;
4) To distribute an anti-smoking CD-ROM to 1,700 NWT children and youth within the first year;
5) Within the first year, to obtain 500 commitment cards from children and youth to remain smoke-free;
6) To obtain 5,600 hits on an anti-smoking website within the first two years;
7) Parents and guardians of youth will be actively involved in supporting the campaign's objectives of reducing youth smoking, and, secondarily, smoking among those of all ages; and
8) To have the rate of smoking among children in the NWT aged 11 to 17 decrease by 10% in the first three years.

Evaluation Methodology

The Mass Media Tobacco Strategy Evaluation was undertaken to identify the success of the "Don't be a Butthead – Be Smoke Free" campaign, relative to its eight stated objectives.

Some of the key activities in the evaluation framework included:

- completion of 365 surveys with youth aged 8 to 14 years of age;
- completion of 202 surveys with parents/guardians of youth aged 8 to 14 years of age;
- completion of 30 interviews with education stakeholders; and
- completion of 96 interviews with community and health stakeholders.

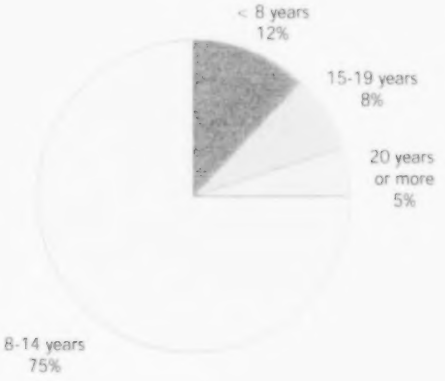
It should be noted that there were some limitations and challenges that impacted the methodological approach and the findings of the evaluation. For example, the interviews were completed over the telephone and any household without a telephone was unable to partake in the interview. In addition, some elements of the campaign were introduced up to 12 months prior to the evaluation – possibly making time a factor in any recall.

[4] *Primary Document: Mass Media Tobacco Strategy Evaluation. Prepared for: Government of the Northwest Territories, Department of Health and Social Services. Prepared by R.A. Malatest & Associates Ltd. and Genesis Group Ltd. October 2005.*

Youth and the Campaign

The campaign was quite successful at targeting youth between 8 and 14 years of age with the message to stay "smoke-free". In fact, 75% of participants in the challenge were in the target age range *(graph 1)*. Most youth recalled having seen the display (81%) and seen the video (66.3%), while fewer youth remember being to the website (30.7%) and receiving the CD-ROM (18.9%).

Graph 1: Age of Participants



A major component of this campaign was "Butthead" – a cartoon character created to bring awareness to the campaign. The large majority of surveyed youth (93%) reported that they had seen the butthead character, with the majority (41%) seeing it at school.

One of the most successful areas of the campaign was the challenge to be smoke-free commitment cards. These cards were distributed and collected at community events, school challenges and promotional events between May 2004 and May 2005. In the end, 2,375 commitments cards were received – surpassing the original objective by more than 1,870. When the youth were asked why they filled a commitment card, the responses were: to be smoke free (65%), to be smoke free and enter the draw (30%), and only to enter the draw (4%). Of all the surveyed youth who had seen a commitment card, only 11% did not make the commitment.

When the parents/guardians of youth were surveyed, 57% said their child signed a commitment card. Parents/guardians of youth who had made the commitment to be smoke-free were asked how seriously they felt their child took her/his commitment. 87% of those surveyed felt that their child took the commitment "very seriously", and 12% felt that their child took her/his commitment "somewhat seriously", while only one parent/guardian felt that their child took her/his commitment "not at all seriously". While the chance to win a draw prize was offered to every youth who filled a commitment card, it does not appear to be the main reason youth choose to make the commitment to be smoke-free.

Parents/Guardians and the Campaign

In order to measure the reach of the campaign and gain insight into the participation of youth in the campaign, parents and guardians of youth aged 8 to 14 years of age were surveyed.

More than 85% of the surveyed parents/guardians said they were aware of the Butthead campaign – this could be attributed to the promotions specifically aimed at adults, such as the parent/guardian brochure, newspaper advertisements and radio advertisements.

The brochure titled "Take the Challenge: Help Your Children to Be Smoke Free" was produced in both English and French and more than half (54%) of those surveyed remembered receiving it. Of those who remembered receiving the brochure, 71% claimed that they had read it. The major purpose of the brochure was to get parents/guardians to talk to their children about smoking – yet very few recalled that component (5.1%). However, 83% of respondents who had read the brochure did report having talked to their children about smoking.

Newspaper advertisements listing the names of youths who committed to be smoke-free were placed in News/North and L'Aquilon whenever a minimum of 50 commitment cards was received. More than 80% of surveyed parents/guardians remembered seeing the campaign's newspaper advertisements.

Radio advertisements were produced in seven languages, and 37% of respondents, one third, recalled hearing them.

The campaign not only encouraged parent/guardians to talk with their children about being smoke-free, but also encouraged them to examine their own behaviours. A little more than half of those surveyed said that the campaign influenced them in one or more ways *(see table 1)*.

Educators and the Campaign

Interviews with education stakeholders, such as teachers, principals and assistant principals, were designed to collect information on the use of the campaign material, the tobacco curriculum and the level of participation in school challenges.

When surveyed, 100% of the respondents were aware of the campaign. School challenge participation rates were 81% - surpassing the expectation of having only 50% of schools participate. More than 70 classes participated in the challenge – with grades ranging from kindergarten to grade 12. The campaign reached a broader audience than its target age range of 8 – 14 years.

Table 1: Ways the Campaign Influenced Parents/Guardians

It reinforced me into being smoke free	16.5%
I am planning or thinking about quitting smoking	16.5%
Encouraged me to talk to my child about smoking	15.2%
Increased my awareness/Made me think	12.7%
I quit smoking	10.1%
I am trying to quit smoking	10.1%
I am reducing my cigarette consumption	8.9%

The consultant planned to survey 15 educators who used the Butthead campaign material and 15 who did not, but was only able to contact eight educators who did not, which indicated most had used at least some of the campaign material.

A small number of educators felt that students who were smokers could not readily participate since the campaign specifically targeted non-smoking youth and the language in the presentation was not adapted for a First Nation school. Most educators, however, felt that there were no barriers that kept children in their school/classroom from becoming engaged in the Butthead campaign.

In the fall of 2004, the Department of Education, Culture and Employment (ECE) of the NWT distributed tobacco education materials for grades 3 to 9. 79% of the surveyed educators said that they had used the materials this school year – therefore exceeding the objective of having 10 elementary/junior high schools using the tobacco curriculum.

Communities and the Campaign

Senior Administrative Officers (SAO), Band Managers or Chiefs, and Community Health Representatives (CHR) and nurses were also surveyed to determine community involvement in the campaign.

Community stakeholders were less aware of the campaign then the education stakeholders. 77% of those interviewed were aware of the campaign. Recreation leaders had the highest awareness rate among the community stakeholders.

According to 54% of the community and health stakeholders, their community did take steps to recognize, congratulate, or honour youth who made the commitment to be smoke-free. Community and health stakeholders were also asked what they thought were the top five strengths of the campaign *(see table 2)*.

Website Statistics & CD-ROM

The official website of the Don't Be a Butthead - Be Smoke-Free (www.dontbeabutthead.ca) was created to provide youth, parents, guardians, teachers, community and health members with information on tobacco and the campaign.

Website statistics for the campaign's website were collected from May 2004 to July 2005. The Butthead website obtained 3,024 visits, a little more than half of the 5,000 objective. However, the numbers provided may be an underestimate since multiple users on a single computer, accessing the website within a half hour time period are recorded as only one visit. This scenario is likely in school settings. The website can be considered an important component of the campaign as more than 1000 items were downloaded from the website including 531 commitment cards.

CD-ROMs were provided to youth as an effective way to access campaign information for those who do not have access to the Internet or who only have access to slow dial-up connection. The campaign distributed 1,482 CD-ROMs from July 2004 to May 2005, falling somewhat short of the original target of 1,700.

Table 2: Top Five Strengths of the Campaign According to Community/Health Stakeholders

Posters	25.5%
Targeted children and youth	19.6%
Presentation of guest visitor/campaign display	17.6%
Advertising and promotional items (not specified)	15.7%
Raised awareness	11.8%

Butthead is Back!

Due to the large success of the campaign, Butthead is back for another year!

Like last year, youth making a first time commitment to remain smoke-free will get a Butthead T-shirt and their name will be entered into a draw to win a great prize. Those who made a commitment last year will be able to reconfirm their promise by signing a "recommitment" card and will receive additional membership benefits.

Youth who participate in the second phase of the Butthead campaign will have an opportunity to express themselves by taking part in the creative contest. Youth can use video, music, writing, and painting to express their opinions on tobacco. Not only will submissions be showcased in several communities throughout the north, youth will have a chance to work with a professional to turn their creation into a professional message about tobacco.

Walking Prescription – Findings from a Pilot Project

***Elsie De Roose**, Team Leader, Health Promotion, Department of Health and Social Services*
***Geoff Ray**, Executive Director, NWT Recreation and Parks Association*

Health Concerns of Physical Inactivity

As noted in the most recent *NWT Health Status Report*, people who are physically active eat well and maintain healthy weights are generally healthy. It is also recognized that people engaged in at least one healthy behaviour are much more likely to engage in other healthy behaviours.[1]

Many northerners do not engage in these healthy behaviours. Statistics reflecting poor personal health practices is therefore a concern, since relationships between diseases and conditions associated with inactive lifestyles[2] are well known to have a negative influence on health. Individuals who are physically active and eat well enjoy fewer risks for chronic disease and premature death.[3]

In terms of physical activity, the 2003 Canadian Community Health Survey indicates that only 34% of NWT residents 12 years of age or older were considered physically active and only 21% were considered moderately active. This means that almost half (45%) of the territory's residents 12 years of age and older are not active enough to achieve health benefits. This level of physical inactivity presents a serious health issue for the population as a whole and especially for children, who may not be able to meet international guidelines for optimal growth and development.[4,5]

Inactivity is especially high among individuals 45 years of age and older, as signs of chronic diseases such as heart disease, diabetes, and other illnesses related to inactive lifestyles emerge. *Figure 1* presents rates of inactivity by age groups and gender and compares inactivity of Yellowknife residents compared to other NWT communities.

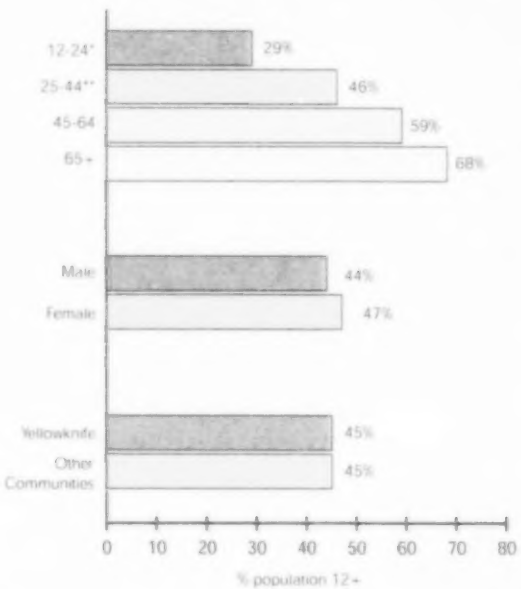
Active Living Benefits

Physical Activity and Health: The Link Between Physical Activity and Morbidity and Mortality[6] and the *SPARC Push Play*[7] cite many well-known benefits of physical activity, especially walking – as summarized in *Table 1*.

Improved health from physical activity also has the potential to lessen the burden of costs on the health system. According to the Conference Board of Canada, a one percent increase in the number of physically active Canadians could potentially save $10.2 million needed to treat heart disease and $877,000 to treat adult-onset diabetes.[8]

In addition to healthy, active lifestyles, regular physical activity guidelines recommend 30 minutes of moderate physical activity a day, four times per week.[9] Walking can meet part of these recommendations. Of the various types of physical activities available to Canadians, walking

Figure 1: Population Physically Inactive by Selected Groups, NWT 2003



* Significantly lower than all other age groups.
** Significantly lower than 45 – 64 and 65+ ($p < .005$)

Table 1: General benefits of Physical Activity and Walking

General benefits of Physical Activity	Benefits of Walking
Reduced risk of premature death, including death from heart disease	Cardiovascular health
Reduced risk of diabetes and high blood pressure; decreases in blood pressure if this condition already exists	Relaxation
Reduced risk of colon cancer	Improved social life
Reduced feeling of depression or anxiety; increased sense of psychological well-being	Self-esteem
Weight control	Energy expenditure
Builds and maintains healthy bones, muscles and joints	Improves posture
Helps older adults improve ability to move without falling	Improves muscular strength
	Healthy bones
	Promotes good posture

is the most common[9] and, if done daily, offers similar benefits as other types of aerobic activities.

Walking clubs are gaining popularity and becoming the norm across Canada. In the Northwest Territories, 71% of residents stated that their major barrier to physical activity was lack of time and 34% cited cost as a barrier; therefore, walking can be a way to be more active.[9] Not only is walking reasonably low-cost (comfortable shock-absorbent shoes or traditional footwear is among the least expensive equipment), it may be done almost anywhere at any time.

Promoting Exercise – a Prescription for Health

Community health and recreation organizations can be ideal front-line physical activity promoters. Health practitioners may have immediate access to sedentary, at-risk clients. They are also respected and valued for their healthcare experience and advice and therefore they can liaise with others to promote exercise interventions. However, some studies have shown a lack of confidence, time and/or training to provide the support systems for increased activity.[11,12,13,14,15]

In 2004/2005, the NWT Recreation and Parks Association and Health Promotion Unit, Department of Health and Social Services, collaborated with a number of organizations to promote active living. This partnership lead to the *Prescription for Health* pilot project based on the concept of medication *prescription pads*. NWT community health professionals and recreation coordinators were invited to pilot *walking prescription pads*.

A Review of Similar Exercise Prescription Projects and Studies

Table 2 provides a list of some of the exercise prescription projects and/or studies that were reviewed as part of the development of the NWT Walking Prescription Pad project. The *Active Yukon Rx* was used as the model for the NWT pilot.

Table 2: A Summary Exercise Prescription/Intervention Programs and/or Studies

Program	Location	Start Date	Program Characteristics
Go for Green (Health Canada) www.goforgreen.ca	Canada	1992	• A national program to encourage Canadians to become more active while helping create a healthier environment. • Includes programs such as the Commuter Challenge, Gardening for Life and Active Transportation. • Physician/self-prescribed; no associated support services.
Active Yukon Rx[10,11] www.rpay.org	Yukon	2000	• *Active Prescription* - delivered by health professionals such as doctors, nurses, dietitians, chiropractors, etc. • A health professional sends an 'active prescription' to the Yukon Recreation and Parks Association (RPAY). RPAY then contacts a patient and signs them up for an Active Workshop (4 week program: goal-setting, nutrition, active living, motivation). • Participants can join "On the Right Path" walking club. • RPAY remains in contact with participants for 6-8 mo; participants track walking progress and receive prizes if a set distance is reached. • Workshop participants that do not join the walking club are contacted at 6, 8 and 12 weeks to check on progress.
Green Prescription (part of the Push Play Program; SPARC)12 www.sparc.org.nz/getting-active/green-prescription/overview	New Zealand	1998	• Criteria for a Green Prescription (GRX) is about 2.5hrs of physical activity/week (medical condition must be stable). • GRX is issued; if a patient wants ongoing support, their GRX is sent to a sports trust in the community who maintains monthly contact with the patient (3-4 months). • The patient reports back to the prescribing health professional; if they would benefit from continued support, another GRX is issued for another 3-4 months.
Active Script Programme (ASP) http://bjsm.bmjjournals.com/cgi/content/full/38/1/19	Australia	1999	• Established by Victorian General Practitioners (GPs). • Sedentary patients are given an Active Script; GPs help patients set activity goals in line with ability, guiding patients to suitable levels of activity. • Patients are offered opportunities to contact an information line for more personalized advice. • Follow-up is performed at the next physician visit.
PACE www.paceproject.org	San Diego, US Canada	1990 2000	• Patient-Centered Assessment and Counselling for Exercise (PACE). • Provides physicians with useful skills during office visits to encourage patients to be more active - • Has been adapted for Canada: http://www.cflri.ca/cflri/research/pace.html
Exercise Counselling by Family Physicians in Canada[13] www.sciencedirect.com	6 Cdn provinces (study)	2003	• 330 family physicians (GPs were defined as those who practice family medicine 75% of the time) surveyed regarding practice/knowledge of exercise for counselling. Results: • 58.2% of GPs believe that only 0 – 25% of patients would respond to 'active living' counselling; 42.4% felt moderately knowledgeable about exercise counselling. • 11.8% of GPs counselled 76 - 100% of their patients. • Barriers GPs identified were a lack of time and a lack of exercise education in medical school.
Dietitian's Surveys [14,15]	Alberta and U.S. (studies)	2004	• In both studies, the finding showed strong support by dietitians for incorporating active living messages into nutrition counselling. • Barriers identified included a lack of knowledge of how to effectively promote active living.

The NWT Walking Prescription Pilot Project

The remainder of this report highlights key features, barriers and recommendations related to this project.

Purpose

To assess the viability of joint health and recreation partnerships in promoting walking prescription pads.

Objectives

- To design and develop a suitable *NWT Walking Prescription Pad*.
- To pilot this project concept in interested NWT communities.
- To encourage community walking clubs to support physical activity.
- To assess the feasibility of the project in the NWT.

Project Layout and Workplan

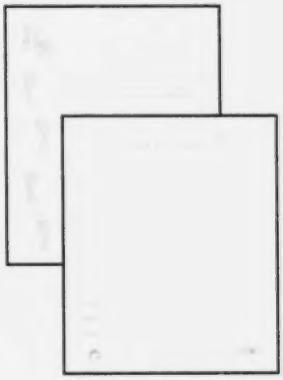
A project coordinator was contracted to develop and evaluate the project. A planning committee provided overall guidance. The project used one approach for Yellowknife and another for smaller NWT communities. Potential pilot sites were solicited through community health and recreation centres.

Originally the pilot (delivered from December 2004 to March 2005) was intended to encourage all kinds of physical activity. However, the focus was further limited to *walking* as the primary type of exercise to be prescribed. Representatives from the *Active Yukon Prescription Program*[1] were contacted to gain insight into the Yukon design, implementation and evaluation.

The NWT project added supplemental material, such as:

- "How to Start a Walking Club" information sheet
- Website references
- A walking log
- Why's and how's of walking
- How to use the walking prescription pad (an easy-to-follow guide)

All organizations that expressed an interest in participating in the pilot (see acknowledgements), received either a package and/or instruction letters and an in-service, or a package/ instructional letter only.



On-going follow-up was provided to determine needs and progress. Unexpectedly, many pilot projects did not start a program as they had initially planned. An interim survey was conducted to determine project status, possible project extension; as well, a final evaluation was completed.

Highlights of Final Evaluation Results

Thirteen individuals were the primary contacts for the pilot:

- 4 family physicians
- 1 nurse
- 8 community contacts (recreation coordinators and health professionals)

These individuals were asked what made them want to participate in this pilot. The most common response given was their interest in getting people more active. Other reasons were: walking is not too rigorous so most people could participate; kids in the community could become involved; and, this project fit with the *Get Active NWT Challenge* (www.getactivenwt.ca).

Table 3: Progress made with the pilot in each community

Physician	Community	Other
1 provided walking prescriptions	1 started a walking club 1 provided participants with walking prescription pads 1 was not able to advance the project beyond the walking club that already existed 1 started a walking club with the local school and gave walking prescriptions to those who participated	3 contacts did not start the project

Non-participant Responses – *(little to no implementation)*

According to the surveyed contacts *that did not use* the prescription pads, reasons given included:

- too busy with work
- uncertain about how to use the prescription pads
- a lack of interest due to timing
- the community already walks as a major mode of transportation
- too much reading material in the package

Participant responses *(partial implementation)*

These respondents were enthusiastic about the idea of prescription pads to promote walking and noted benefits such as helping inactive and overweight individuals become more active or linking the pilot to the Get Active NWT challenge.

These respondents saw the prescription pad as a useful tool for promoting physical activity, since people got to take something home to motivate them and to track progress. Another response though, stated that although the walking prescription was "good on paper"; it was too early to tell if it had any impact.

Pilot Project Barriers and Recommendations for Improvement

The purpose of the Walking Prescription pilot project was to assess the feasibility of a prescription pad as a way to increase physical activity. Due to incomplete participation, the objectives were only partially fulfilled, making evaluation difficult. However, some useful information can be summarized from this project.

Reducing barriers:

- *Better communication between health and recreation sectors*
  Improved communication between health and recreation sectors would improve the project. Despite the attempt for joint participation, some communities experienced limited communication regarding the pilot. Key contacts seemed unaware of their community's participation and there was less collaboration beyond the initial project application than expected.

- *Better project understanding*
  There was some confusion about who should receive prescriptions, fill them out, and how or why the prescription pads related to walking clubs. This confusion prevented one pilot from participating. Project in-services would help explain the prescription pads and project set-up (several respondents felt this would be helpful). Pilot sites that received in-services prior to the project participated more fully than pilots that did not receive an in-service.

- *Cold Weather*
  The Walking Prescription project was conducted in the winter. Feedback indicated less interest due to cold weather. The pilot phase did not include a long enough pilot, which may have seen different results. Running the program longer might have seen better results as better weather would encourage more people to get active (winter weather is a deterrent).

- *Other overall feedback and general recommendations to improve implementation included:*

  - promote walking prescriptions separately from walking clubs/use local advertisements to encourage people to join walking clubs.
  - send prescription pads directly to health professionals and walking club information to recreation coordinators - allows each to focus on respective roles. Health and recreation may need to become more familiar with these roles, communications channels, and concerns of clients/walking club members, periodically discuss issues, gather ideas and make suggestions for improvement.
  - simple direction and fewer materials would be more effective.
  - in-services to pilot sites; increase community awareness of the pilot walking prescription pad project, walking clubs, and use of materials.
  - since people seemed less interested in walking outdoors in cold weather, sites may want to

start a walking club in warmer weather to increase the long-term habit-forming potential for walking. Once in the habit, people may be more inclined to continue after seeing the health benefits. Include indoor walking in gyms, recreation halls, arenas, or other large buildings/sites.

- conduct random evaluations to determine participant reaction and whether or not these programs encourage more activity.
- set distance goals for participating in walking clubs; offer individual/team prizes for distances reached.
- offer pedometers for participating walking clubs and provide incentives to promote participation.
- provide walking prescriptions in other languages besides English.
- In one community, children were given the walking prescription but the prescriptions were received with indifference since there was no incentive offered. However, some thought they might continue using the walking prescription pads beyond the end of the pilot. One community expected more participation with warmer weather. Overall, the response was positive.

Conclusions

Despite the barriers outlined, two conclusions might be drawn as indicators for future initiatives that promote active living:

- NWT health and recreation professionals seem interested in the concept of a walking prescription or some form of promotion to encourage active living. These findings are consistent with current literature and evaluation of other similar programs;
- Changes in project delivery are necessary for it to be used and/or effective in increasing physical activity.

Acknowledgements – Pilot Project Committee Members and Funding Support

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The pilot projects included health and recreation programs from Wrigley, Gameti, Paulatuk, Aklavik, Inuvik, Fort Good Hope, Fort Liard, and Behchoko; the Psychiatry Unit, Stanton Territorial Hospital (STH); Yellowknife physicians; Paul Hanna, Yellowknife Walking Club.

Sandra Duncan, *Active Yukon*, provided helpful information and experience from the Yukon project.

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NWT School Active Living Kits

A Summary of Findings from a Two Year Pilot

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***Elaine Stewart**, Coordinator, Early Childhood Programs, Department of Education, Culture and Employment*

Introduction

The Northwest Territories is among a growing number of jurisdictions across Canada that are either using or developing physical activity models for schools. Some examples from other provinces and territories include: *Ever Active Schools*, Alberta; *Living School Initiative*, Ontario; *School Communities in Action* – New Brunswick; *Active Kids, Healthy Kids* – Nova Scotia; *Active Schools*, Ontario; *Action Schools BC*, British Columbia; and *Active Yukon Schools*, Yukon.[1]

This article provides a brief overview of the results of a two-year project in NWT schools. The project was designed to pilot Active Living Kits that could be easily used in classrooms in order to increase opportunities that make physical activity easy and fun. In 2004, Active Living Kits were distributed for use by grade 1 – 8 teachers and in 2005, for grade 4 – 6 teachers. As has been described in several past or current *EpiNorth* articles, poor nutrition, overweight and obesity among children is a concern in the NWT as well as most other jurisdictions.[2,3,4]

The NWT School Active Living Kits were used by a small number of interested schools. The kits contained games, educational resources, fitness circuits and equipment. The kits were essentially the same for both years; however, the 2005 version was modified, based on feedback from 2004 (contents were either added or removed, and the target group was also narrowed). Participating schools can be found in *Table 1*.

Although preliminary findings are presented from a small number of pilot sites and survey responses (N = 19), the results are noteworthy since there is a need to pilot materials prior to a large-scale initiative and obtain feedback from the ultimate users of the materials.

Evaluation Methodology

At the end of each year of the pilot project (spring of 2004 and 2005), surveys were distributed to all participating schools. A small committee developed the survey, and virtually the same survey was used for both years.

Overall, feedback was requested about usage, most popular items, suggestions for future distribution, packaging, in-service or training needs, recommendations and overall comments. Due to small sample size, some evaluation results from each year are combined.

Highlights of Evaluation

Frequency of use/utility

Teachers from the pilot study schools reported that, on average, the kits were used 1 – 2 days per week. Most respondents found the kit very or moderately useful. Respondents provided many favorable comments, such as *"The "fun" activities made it so much easier for kids to get active physically"* and *"2 – 3 times a week is better than none at all"*.

Table 1: Participating School Classrooms in Pilot and Evaluation

2004, (Grades 1 – 8) n= 8	2005, (Grades 4-6) n = 11
Deninu School, Fort Resolution*	Alexis Arrowmaker School, Wekweti*
Charles Tetcho School, Trout Lake*	K'alemi School, N'Dilo*
Ecole J.H. Sissons School, Yellowknife*	Thomas Simpson School, Fort Simpson*
Mildred Hall Elementary School, Yeliowknife*	Weledeh Catholic School, Yellowknife*
Kaw Tay Whee School, Dettah	Mezi Community School, Wha Ti*
	Range Lake North School, Yellowknife

*Total number of survey responses, both years N=19
Two schools did not participate in the evaluation

Kit items used most:

Teachers rated the following items in the Kits as most useful:

Most useful items* in the Active Living Kits

	2004	2005
Highest Ranking	Juggling scarves Balloons Elastics Plates (paddles) Relaxation exercises	Games and activities Small balls Pedometers Balls Therabands Stretch circuit training
Second highest	"Walk this way" activity Games/activity series	Short and long skipping ropes Pedometers Hackey sacks Fitness wheels

* Approximately 20 – 30 items were provided in the kits each year.

Several positive comments were received regarding the kits, such as *"I am looking forward to having the kit at the beginning of the year next fall and being better able to incorporate it"*. Suggestions for additional items that would be useful included: rubber balls, ideas for other units, adding music, mathematics related activities and more games that incorporate learning and active living in the classroom.

According to a previous survey, about 52% of NWT schools feel that students are less active than they were 10 years ago. Schools also suggested that fun, active living ideas, combined with the regular curriculum, are the best ways to improve learning and activity.[4]

Format and distribution feedback:

Despite a small pilot and evaluation, the qualitative responses generally expressed an interest in an NWT-wide school distribution of Active Living Kits. Some comments received were: *"Enjoyed using the material for workshops, games, circuits and other activities"*, and *"we enjoyed this, it keeps us moving."*

Table 2 provides some suggestions for future distribution of the Active Living Kits.

In terms of format, the teachers would prefer the kit to come in a banker's box with a brochure that provides a Kit overview.

Other feedback and recommendations:

"I hope that all NWT classrooms can use this at some point". This comment generally sums up the feedback from the teachers who piloted the Active Living Kits in 2004 and 2005. This feedback is also consistent with a previous territory wide school survey where teachers suggested the need for more PE/activity programs and support as a means to increase physical activity in schools.[4]

Activity and learning go hand in hand

This evaluation increases our understanding of possible avenues for incorporating active living into the classroom in order to increase active living opportunities for children. A small number of teachers indicated that incorporating active living into regular class programming may be feasible if useful material was available, easy to use, and that there is the possibility of such materials becoming a regular component, particularly for younger grades.

Table 2. Recommendations for Distribution of the Active Living Kits

Responses	2004	2005
Provide a complete kit to each teacher	4	4
Provide the most useful items as determined by the evaluation	2	1
Make a suggested content list on-line, with downloadable items	1	1

It has been well documented that school staff find teaching classes with additional materials a positive experience, since the materials create improved student attitudes, discipline, behaviour and creativity.[5]

Discussion

Partners in the promotion of active living are as many and varied as the kinds of physical activities that children and communities enjoy. Schools are among the many partners and venues that can promote active, healthy children and youth.

If parents, schools and communities all play a role, it is possible to see a reversal of the trends of overweight and obesity in children and positive changes in behaviour and learning potential. Active Living Kits, already being used or piloted in seven other Canadian jurisdictions, may be adapted as another tool in an arsenal that creates supportive environments for increased physical activity. The next steps for this project include a review of materials from other jurisdictions that can be added to the existing NWT Active Living Kits, resulting in a made in the north version for younger grades of NWT schools.

Acknowledgements

The participation of the NWT schools that took the time to participate in the pilot and evaluation is greatly appreciated.

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For more information regarding the Active Living Kits, contact Jo Russell: Joanna_Russell@gov.nt.ca

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HEALTH .online
Active Living Resources

***Janet Hopkins**, Project Officer, Population Health*

Having healthy, active children are top goals for parents. But what are the best approaches to encouraging healthy choices for meals and snacks for children and teenagers? How much exercise is really enough? How do you get children to eat vegetables when they would prefer to eat fast food? How can schools and parents work in partnership to help encourage healthy habits in young people?

Below are a selection of web sites to help answer those questions and provide other information on healthy living for parents and professionals.

http://www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/ The Public Health Agency of Canada provides a broad range of information on promoting active living for parents and teachers.

http://www.readysetgo.org

This site tells us:

Kids today live in a very different world than the generation before them. Children as young as six or seven can occupy themselves for hours on a computer, and older kids now chat on-line rather than meeting in a front yard to play. They say... Get a move on!

http://www.cps.ca/english/statements/HAL/HAL02-01.htm

The Canadian Pediatric Society provides professionals and parents with detailed information on active living and recommendations for Physicians and health care professionals to promote healthy active living.

http://www.dontbeabutthead.ca/

This site provided by the Department of Health and Social Services is an interactive fun site encouraging youth to lead a healthy lifestyle and to be smoke free.

Most of these sites also provide links to help us understand more about the effects that poor lifestyle habits, such as unhealthy eating and physical inactivity contribute to increased adult morbidity and mortality from chronic diseases. They also provide many suggestions and recommendations on how we can help our kids become healthy active adults.

NOTIFIABLE diseases

Cummulative Totals for the Northwest Territories (NWT) January - September 2005[a]

	January - December 2004	January - September 2005
	NWT	NWT
Hepatitis B	0	0
Haemophilus Influenzae	0	0
Influenzae A	0	12
Influenzae B	0	3
Pertussis	0	5
Chicken Pox	41	9
Chlamydia	649	544
Gonorrhea	181	88
Hepatitis C	34	15
Hepatitis, Other	0	0
Syphilis	0	0
Invasive Group A Strep	3	1
Invasive Group B Strep in neonates	0	0
Invasive Group B Strepococcus	1	0
Invasive Pneumococcal Disease	15	9
Legionellosis	0	0
Listeriosis	0	0
Meningitis, Other Bacterial	0	0
Meningitis, Unspecified	0	0
Meningitis, Viral	1	0
Meningococcal Infections	1	0
Respiratory Syncytial Virus	41	52
Tuberculosis	10	7
Botulism	0	0
Campylobacteriosis	5	3
Cryptosporidiosis	0	0
E.Coli 0157:H7	3	2
Giardiasis	12	5
Hepatitis A	0	0
Salmonellosis	3	2
Shigellosis	0	0
Tapeworm Infestation	0	0
Trichinosis	0	0
Yersinia	0	0
Brucellosis	0	0
Malaria	2	0
Rabies Exposure	10	6
Methicillin-resistant Staph.Aureus	10	20
Vancomycin-resistant Enterococci	0	0

NWT HIV Infections Reported from 1987 to 2005

Total	0-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Female	Male	MSM[b]	MSM/ IDU	IDU	Hetero-sexual	Perinatal	Blood Products
28	1	0	0	4	17	5	1	1	5	24	12	1	7	7	1	1

a Statistics are based on currently available data and previous data may be subject to change
b Men who have sex with men (MSM)
c Injection Drug User (IDU)